

AIR QUALITY PERMIT

Issued to: Trinity Industries, Inc.
901 North Lake
Miles City, MT 59301

Permit: #2833-04
Administrative Amendment Received:
October 03, 2003
Department Decision on Administrative
Amendment: November 26, 2003
Permit Final: December 13, 2003
AFS#: 017-0004

An air quality permit, with conditions, is hereby granted to Trinity Industries, Inc. (Trinity), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

Trinity's railcar maintenance facility is located in the SW¼ of Section 27, Township 8 North, Range 47 East, Custer County, Montana.

B. Current Permit Action

On October 3, 2003, the Montana Department of Environmental Quality (Department) received a request from Trinity to amend Permit #2833-03. The permit change involves adding limitation and recordkeeping to the permit to keep Trinity's emissions below 10 tons/year of any one Hazardous Air Pollutant (HAP) and 25 tons/year of combined HAPs. The limitation makes the Trinity facility a synthetic minor source for Title V purposes. The permit has also been updated to reflect current permit language and rule references used by the Department.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Trinity shall install, operate, and maintain exhaust filter chambers to control particulate emissions from JBI paint booth #1 and JBI paint booth #2 (ARM 17.8.752).
2. Trinity shall install, operate, and maintain an enclosure on sandblasting unit #1 and sandblasting unit #2 to control particulate emissions from the railcar sandblasting operation (ARM 17.8.752).
3. Trinity shall install, operate, and maintain an enclosure and a baghouse to control particulate emissions from the gritblasting unit (ARM 17.8.752).
4. Trinity shall not operate the industrial boiler (ARM 17.8.749).
5. Combined sandblasting material throughput for sandblasting unit #1 and sandblasting unit #2 shall not exceed 2,300 tons during any rolling 12-month time period (ARM 17.8.749).

6. Trinity shall use a high-volume, low-pressure (HVL), an airless, an air assisted airless, or a plural component spray gun when spray painting in JBI paint booth #1 and JBI paint booth #2 (ARM 17.8.749).
7. The VOC concentration in spray coating/paint shall not exceed a daily weighted average of 4.0 lb/gallon and the spray coating/paint use shall not exceed 49,000 gallons during any rolling 12-month time period (ARM 17.8.749).
8. Trinity shall limit the hours of operation and/or facility production such that the emission of any individual HAP is less than 10 tons during any rolling 12-month time period and the combined emission of HAPs is less than 25 tons during any rolling 12-month time period. Any calculations used to establish HAP emissions shall be approved by the Department (ARM 17.8.749).
9. Trinity shall not cause or authorize to be discharged into the atmosphere any visible fugitive emissions, from the railcar blasting, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308).
10. Trinity shall not cause or authorize to be discharged into the atmosphere from any source installed after November 23, 1968, emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
11. Trinity shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
12. Trinity shall treat all unpaved portions of the streets, roads, or parking lots with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.C.11. (ARM 17.8.752).

B. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require testing (ARM 17.8.105).

C. Operational and Emission Inventory Reporting Requirements

1. Trinity shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. Trinity shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis

change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. Trinity shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted with the annual emission inventory information (ARM 17.8.1204).
4. Trinity shall document, by month, total sandblasting material throughput. By the 25th of each month, Trinity shall total material throughput during the previous 12 months to verify compliance with the limitation in Section II.A.5. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).
5. Trinity shall document, by month, the total gallons of coating/paint used in spray-painting operations. By the 25th of each month, Trinity shall total the gallons used during the previous 12 months to verify compliance with the limitation in Section II.A.7. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749 and ARM 17.8.1204).
6. Trinity shall document, by month, the total emission of any individual HAP. By the 25th of each month, Trinity shall total the emissions of any individual HAP and the combined emission of HAPs during the previous 12 months to verify compliance with the limitation in Section II.A.8. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749 and ARM 17.8.1204).
7. All records compiled in accordance with this permit must be maintained by Trinity as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department and must be submitted to the Department upon request (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – Trinity shall allow the Department’s representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Trinity fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Trinity of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.

- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders it’s decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The Department’s decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Trinity may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

PERMIT ANALYSIS
Trinity Industries, Inc.
Permit #2833-04

I. Introduction/Process Description

A. Permitted Equipment

Trinity Industries, Inc. (Trinity) owns and operates the following equipment:

- 2 – JBI Paint Booths (Booth #1 and #2)
- 2 – Sandblasting Operations (Unit #1 and #2)
- 1 – Gritblasting Operation

B. Source Description

This facility is a railcar maintenance facility and it is located in the SW¼ of Section 27, Township 8 North, Range 47 East, in Custer County, Montana.

C. Permit History

On September 22, 1995, **Permit #2833-00** was issued to Transcisco Rail Service to operate a railcar maintenance facility.

On April 17, 1997, **Permit #2833-01** was issued to Trinity. The modification was due to a transfer of ownership from Transcisco Rail Services to Trinity. Permit #2833-01 replaced Permit #2833-00.

On August 31, 1999, the Department of Environmental Quality (Department) received information from Trinity about the replacement of the existing spray painting booth and sandblasting operation at the facility. The permit was updated to allow Trinity to install JBI paint booth #1 and sandblasting unit #1. The permitted changes were accomplished in accordance with ARM 17.8.705(1)(r). Permit **#2833-02** replaced Permit #2833-01.

On November 3, 2000, the Department received a complete permit application to alter Permit #2833-02. The alteration involved the addition of a JBI paint booth, a gritblasting operation, and a sandblasting unit to the previously permitted sources at the facility. A complete list of permitted equipment was contained in Section I.B. of the permit analysis. Permit **#2833-03** replaced Permit #2833-02.

D. Current Permit Action

On October 3, 2003, the Department received a request from Trinity to amend Permit #2833-03. The permit change involves adding limitation and recordkeeping to the permit to keep Trinity's emissions below 10 tons/year of any one Hazardous Air Pollutant (HAP) and 25 tons/year of combined HAPs. The limitation makes the Trinity facility a synthetic minor source for Title V purposes. The permit has also been updated to reflect current permit language and rule references used by the Department. Permit **#2833-04** replaces Permit #2833-03.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Trinity shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including, but not limited to:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.213 Ambient Air Quality Standard for Ozone
3. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
4. ARM 17.8.221 Ambient Air Quality Standard for Visibility
5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Trinity must maintain compliance with all applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Trinity shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
4. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of an affected source for any NSPS subpart defined in 40 CFR Part 60.

D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Trinity was not required to submit a permit application fee because the permit action is considered administrative.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; and the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. Trinity has the PTE more than 25 tons per year of Volatile Organic Compounds (VOC); therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Trinity was not required to submit an application because the permit action is considered administrative.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis. Trinity was not required to submit a BACT analysis because the permit action is considered administrative.
8. ARM 17.8.755 Inspection of Permit. This rule requires air quality permits be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Trinity of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit

limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not listed and does not have the PTE more than 250 tons per year of any air pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one HAP, PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2833-04 for Trinity, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for and one HAP and less than 25 tons/year for all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is not subject to any current NSPS.
 - e. This facility is not subject to any current NESHAP standards.

- f. This source is not a Title IV affected source, nor a solid waste combustion unit.
- g. This source is not an EPA designated Title V source. Trinity's Permit #2833-04 includes federally enforceable limits that allow the facility to stay below the Title V operating permit threshold. Therefore, the facility will not be required to obtain a Title V operating permit.
- h. As allowed by ARM 17.8.1204(3), the Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations that limit that source's potential to emit.
 - i. In applying for an exemption under this section the owner or operator of the source shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

Trinity has taken federally enforceable permit limits to keep potential emissions below major source permitting thresholds. Therefore, the facility is not a major source and, thus a Title V operating permit is not required.

The Department determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

- 3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. Trinity shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information.

Based on these facts, the Department determined that Trinity would be a minor source of emissions as defined under Title V.

III. BACT Determination

A BACT determination is required for each new or altered source. Trinity shall install on the new, or altered, source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. Trinity was not required to submit a BACT analysis because the permit action is considered administrative.

IV. Emission Inventory

Tons/year					
Source	VOC	Single HAP	Combined HAPs	PM	PM ₁₀
JB1 Paint Booth #1	49.00			1.23	1.23
JB1 Paint Booth #2	49.00			1.23	1.23
Sandblasting Unit #1	0.00			31.34	15.09
Sandblasting Unit #2	0.00			31.34	15.09
Gritblasting Unit	0.00			0.13	0.13
Total	98.00	Less than 10	Less than 25	65.27	32.77

JB1 Paint Booth #1

Process Capacity: 20 gallons coating/hour (company information)
 VOC Concentration: 4.0 lb VOC/gallon coating (company information)
 Hours of Operation: 1225 hours/year

VOC Emissions

20 gal. coating/hr * 4.0 lb VOC/gal. coating * 1225 hr/yr * 0.0005 ton/lb = 49 ton/yr

PM and PM₁₀ Emissions

Process Capacity: 20 gallons coating/hour (company information)
 PM & PM₁₀ Concentration: 10 lb PM/gallon coating (average product concentration: company information)
 Hours of Operation: 1225 hours/year
 Booth Control Efficiency: 99% (manufacturers information)

PM Emissions

20 gal. coating/hr * 10 lb PM/gal. coating * 1225 hr/yr * (1 - 0.99) * 0.0005 ton/lb = 1.23 ton/yr

PM₁₀ Emissions

20 gal. coating/hr * 10 lb PM/gal. coating * 1225 hr/yr * (1 - 0.99) * 0.0005 ton/lb = 1.23 ton/yr

JB1 Paint Booth #2

Process Capacity: 20 gallons coating/hour (company information)
 VOC Concentration: 4.0 lb VOC/gallon coating (company information)
 Hours of Operation: 1225 hours/year

VOC Emissions

20 gal. coating/hr * 4.0 lb VOC/gal. coating * 1225 hr/yr * 0.0005 ton/lb = 49 ton/yr

PM and PM₁₀ Emissions

Process Capacity: 20 gallons coating/hour (company information)
 PM & PM₁₀ Concentration: 10 lb PM/gallon coating (average product concentration: company information)
 Hours of Operation: 1225 hours/year
 Booth Control Efficiency: 99% (manufacturers information)

PM Emissions

20 gal. coating/hr * 10 lb PM/gal. coating * 1225 hr/yr * (1 - 0.99) * 0.0005 ton/lb = 1.23 ton/yr

PM₁₀ Emissions

20 gal. coating/hr * 10 lb PM/gal. coating * 1225 hr/yr * (1 - 0.99) * 0.0005 ton/lb = 1.23 ton/yr

Sandblasting Unit #1

Maximum Process Rate: 265 lb/hour
Hours of Operation: 8760 hr/year

PM Emissions

PM Emission Factor: 0.027 lb/lb blast media (AP-42 Chapter 13, Table 13.2.6-1, 9/97)
Calculation: $265 \text{ lb/hr} * 0.027 \text{ lb/lb} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 31.34 \text{ ton/yr}$

PM₁₀ Emissions

PM₁₀ Emission Factor: 0.013 lb/lb blast media (AP-42 Chapter 13, Table 13.2.6-1, 9/97)
Calculation: $265 \text{ lb/hr} * 0.013 \text{ lb/lb} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 15.09 \text{ ton/yr}$

Sandblasting Unit #2

Maximum Process Rate: 265 lb/hour
Hours of Operation: 8760 hr/year

PM Emissions

PM Emission Factor: 0.027 lb/lb blast media (AP-42 Chapter 13, Table 13.2.6-1, 9/97)
Calculation: $265 \text{ lb/hr} * 0.027 \text{ lb/lb} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 31.34 \text{ ton/yr}$

PM₁₀ Emissions

PM₁₀ Emission Factor: 0.013 lb/lb blast media (AP-42 Chapter 13, Table 13.2.6-1, 9/97)
Calculation: $265 \text{ lb/hr} * 0.013 \text{ lb/lb} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 15.09 \text{ ton/yr}$

Grit Blasting Operation

Process Rate: 4320 lb/hour
Hours of Operation: 8760 hr/year
Baghouse Control Efficiency: 99%
Blasting Media: Steel Shot/Grit

PM Emissions

PM Emission Factor: 0.00069 lb/lb blast media (AP-42 Chapter 13, Table 13.2.6-1, 9/97)
Calculation: $4320 \text{ lb/hr} * 0.00069 \text{ lb/lb} * 8760 \text{ hr/yr} * (1 - 0.99) * 0.0005 \text{ ton/lb} = 0.13 \text{ ton/yr}$

PM₁₀ Emissions

PM₁₀ Emission Factor: 0.00069 lb/lb blast media (AP-42 Chapter 13, Table 13.2.6-1, 9/97)
Calculation: $4320 \text{ lb/hr} * 0.00069 \text{ lb/lb} * 8760 \text{ hr/yr} * (1 - 0.99) * 0.0005 \text{ ton/lb} = 0.13 \text{ ton/yr}$

V. Existing Air Quality & Ambient Air Impact Analysis

Trinity is located in the SW¹/₄ of Section 27, Township 8 North, Range 47 East, in Custer County, Montana. The air quality of this area is classified as either Better than National Standards or unclassifiable/attainment of the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The amount of controlled emissions from the proposed permit changes will not cause an exceedance of any ambient air quality standard.

VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

Analysis prepared by: Chris Ames
Date: November 21, 2003